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THE USAF PEO/DAC/MAD STRUCTURE: SUCCESSFUL PATTERN FOR FUTURE WEAPON SYSTEM ACQUISITION?

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Among the acquisition streamlining initiatives of the past decade was the creation of the program executive officer position to oversee the execution of a portfolio of related major programs. This officer, in the direct reporting chain between the program manager and the service acquisition executive, has improved and focused program oversight and execution. But the imposed insertion of this position into the existing Air Force acquisition structure has complicated the relative roles and responsibilities with other acquisition officials—specifically, the mission area directors and the designated acquisition commanders—and has had mixed results.

defense acquisition costs in the 1980s exceeding \$115 billion annually and amounting to more than 40 percent of the defense budget (Secretary of Defense, 1993), it was only appropriate that the Department of Defense (DoD) and Congress focus on various acquisition streamlining and reform initiatives. In 1986, the Packard Commission identified numerous shortcomings in the acquisition process and recommended several improvements. These

recommendations became the goals of subsequent legislation, Presidential directives and DoD regulations. The result of these actions was a major restructuring of how the Office of the Secretary of Defense (OSD) and the services conduct acquisition activities.

One significant change was the creation of the position of program executive officer (PEO): a corporate operating official who would supervise a portfolio of mission-related major and selected programs and be accountable to the service acquisition executive (SAE). This line officer, in the direct reporting chain between the program manager (PM) and the SAE, would streamline and focus the activities associated with executing and overseeing these programs. In spite of the many benefits this new position offered, its imposed insertion into an existing organizational structure complicated the relative roles and responsibilities of other acquisition officials, specifically (in the Air Force [AF]) the designated acquisition commanders (DACs) and the mission area directors (MADs).

This research project (carried out for the Industrial College of the Armed Forces), evaluates the Air Force PEO/DAC/MAD acquisition structure in terms of these relationships to assess its contribution to the goals of the Packard Commission. To address this subject, I will first discuss the background of the creation of the PEO position, then focus on the overall Air Force weapon system acquisition structure, with emphasis on the roles and responsibilities of the PEOs, DACs, and MADs. Third, I will discuss the issues that arise in implementing the details of this structure and how they might affect the overall performance of the Air Force acquisition community. Finally, I will present some of the options that may improve the effectiveness of this structure. Because the PEO concept represents the newest addition to a relatively well-established structure, I will present this evaluation primarily from the PEO perspective and use the description of the DAC and MAD roles to frame the discussion.

METHODOLOGY

This research project is the result of a literature search and interviews. Literature sources included official reports, briefings, directives, and memoranda; informal topic and offsite materials; and magazine and newspaper articles. Individuals interviewed included selected present and former members in the PEO/DAC/MAD acquisition structure.

BACKGROUND

PACKARD COMMISSION

In response to public criticisms of sensationalized cost overruns, faulty weapon system performance, and perceived contractor fraud, the Reagan administration appointed David Packard, former Deputy Secretary of Defense, to lead the Blue-Ribbon Commission on Defense Management (commonly referred to as the Packard Commission). This body evaluated defense acquisition, organization, and decision-making, Congressional oversight, and the national command structure Reeves, 1996). Its major task was to determine if the implementation of private sector methodologies could improve defense management business practices (Santo-Donato, 1991, p. 3).

The Commission reported that cost, schedule, and performance problems in weapon system development and procurement were attributable to an encumbered and unproductive acquisition management system. This system lacked, among other things, "(1) clear accountability for acquisition execution and (2) unambiguous lines of authority for individuals with

program management responsibilities" (General Accounting Office (GAO), 1990, p. 1). Another assessment was that the program manager's effectiveness in executing his program suffered from the excessive time and effort spent on preparing reports and briefings (Brooks, 1991, p. 3).

The Commission report made some key recommendations to rectify observed structural and procedural weaknesses in DoD acquisition management. One was that each service should institute a threetiered structure for all major defense programs. This structure would consist of an SAE, 1 responsible for all acquisition matters; PEOs, individually responsible for a limited group of major programs; and program managers,² responsible to the PEO for all program-related matters (GAO, 1990, p. 1). Further, to achieve more efficient and effective management, this acquisition structure should revise its practices and procedures to emulate the characteristics of most successful commercial and government projects. Among these characteristics are:

- clear command channels—clear alignment of responsibility and authority, preserved and promoted through short, unambiguous chains of command to the most senior decision makers;
- program stability—a stable environment of funding and management, predicated on an agreed baseline for cost, schedule, and performance;
- limited reporting requirements adherence to the principle of "management by exception," and methods of ensuring accountability that focus on deviations from the agreed baseline;

- small, high-quality staffs—reliance on small staffs of specially trained and highly motivated personnel;
- communication with users—sound understanding of user needs achieved early on and reflecting a proper balance among cost, schedule, and performance considerations; and
- better system development—including aggressive use of prototyping and testing to identify and remedy problems well before production, investment in a strong technology base that emphasizes lower cost approaches to building capable weapon systems, greater reliance on commercial products, and increased use of commercial-style competition (Cheney, 1989; U.S. President's Blue Ribbon Commission, 1986; Reeves, 1996).

The Packard Commission submitted its final report in June 1986. President Ronald Reagan implemented its recommendations in National Security Decision Directive (NSDD) 219 (1986).

LEGISLATIVE INFLUENCE

Two contemporary laws also played a role in establishing this new acquisition structure for DoD. First, the Goldwater-Nichols DoD Reorganization Act (Public Law 99-433) (1986) sought "to reduce the bureaucratic layering and duplication existing within the DoD acquisition process, and to produce acquisition programs that would better meet cost, schedule, and performance criteria" (Santo-Donato, 1991). This law designated within OSD the (current) position of Under Secretary of Defense for Acquisition and Technology—USD

(A&T)³—while the second law, the National Defense Authorization Act for Fiscal Year 1987 Public Law 99-961), outlined his duties, responsibilities, and authority (Brooks, 1991, p.4).

Unfortunately, this legislation did not achieve the desired change in DoD. Congress and other organizations external to DoD soon began to criticize the Pentagon

In response to aitiasms, President George Bush directed the Defense Management. Review(DMR) in February 1989 to "reviewDcD menagement and develop a plan to fully implement the Cammissian's reconnendations. improve the acquisition process, and more effectively manage DcD rescurces"

for failing to complete the acquisition reforms recommended by previous commissions (Willis, 1990). According to the GAO report, these criticisms were based on the Services affixing the new titles to existing positions in the old structures, failing to empower the PM-PEO-SAE

chain with the authority and control intended, and failing to eliminate the unnecessary intermediate management layers (GAO, 1990, p. 2).

DOD TAKES ACTION

In response to criticisms, President George Bush directed the Defense Management Review (DMR) in February 1989 to "review DoD management and develop a plan to fully implement the Commission's recommendations, improve the acquisition process, and more effectively manage DoD resources" (GAO, 1990, p. 2).

By December 1990, the GAO reported that the Services had taken action to revise their acquisition structures to comply with the Commission's intent. What remained was DoD's updating of its implementation guidance, policies, and procedures to reflect the DMR changes.

DoD took the necessary steps in the following months. For example, DoD Directive 5000.1, "Defense Acquisition," DoD Instruction 5000.2, "Defense Acquisition Management, Policies and Procedures," and DoD Directive 5000.49, "Defense Acquisition Board," all address the role of the Defense Acquisition Executive (DAE), SAE, and PEO (Santo-Donato, 1991, p. 16).

DoD asserted that the implementation would yield improved effectiveness and cost avoidance in weapon system acquisition, with projected savings. Secretary of Defense (SECDEF) Richard B. Cheney stated that these savings would be applied to readiness, modernization, maintaining force structure, and improving quality of life (Fulghum, 1990).

AIR FORCE IMPLEMENTATION OF THE PEO

In response to the 1986 creation of the PEO position and function, the Air Force originally attempted to use its existing acquisition structure to accommodate the requirements. The Air Force appointed 11 PEOs, most of who were product division or air logistics center commanders. These officers served dual-hatted roles: Keep the Air Force acquisition executive (AFAE) apprised of program status and report to the major commands (MAJCOM) (Air Force Systems Command [AFSC] or Air Force Logistics Command [AFLC]) commander on their control of program resources and major program decisions (Brooks, 1991, p. 4).

The 1989 DMR forced greater changes, however. The Air Force identified six PEOs (five general officers, one senior civilian executive), separate from the product center structures, which would have no other responsibilities. These PEOs oversaw key weapons systems in strategic, information systems, tactical and airlift, space, tactical strike, and command, control, and communications. According to the Secretary of the Air Force (SECAF) Donald Rice, this new system would provide program managers with greater autonomy, responsibility, accountability, and time to focus on their programs. "The PEO would plan corporate strategies and objectives, and serve as a problem-solving team leader supported by the systems and logistics commands." Center commanders would provide support (e.g., needed experts, test and research facilities, and materials) (Schmoll and Cochrane, 1996).

Thus, legislation, regulations, and directives have crafted the structure DoD uses today to develop and procure weapon systems. From this process, the Air Force has delineated an organization for planning, programming, budgeting, and executing acquisition programs. This structure is still viable in the Air Force, but continues to evolve with time as leadership, portfolios, and other needs dictate. Who are the key players in the Air Force acquisition community, and what are their roles and responsibilities?

STRUCTURE, ROLES, AND RESPONSIBILITIES

AIR FORCE ACQUISITION CHAIN OF COMMAND

Acquisition Policy Directive 63-1 (August 31, 1993) established the current

Air Force acquisition system for "providing new and improved materiel capabilities in response to validated needs and according to public law, appropriate instructions, and international agree-

ments"(Jaquish, 1993). It prescribes the requisite streamlined structure (see Figure 1) in which no more than two levels of review exist between the program manager and the Milestone Decision Authority (MDA). Thus, depending on the dollar value,

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risk level, and importance of the program, the program manager reports through either the DAC, PEO, or, under special circumstances, directly to the AFAE.⁵

This new system effectively took the major command out of the program management chain. HQ Air Force major command focus lies on processes and resource management. The staff is less involved in program management oversight; its role is supporting the acquisition process and providing the funding and human resources the program manager needs to execute his program (Brooks, 1991, p. 17).

The AFAE, who is also the Assistant Secretary of the Air Force (Acquisition) (ASAF[A] or SAF/AQ), is responsible for all Air Force acquisition. His primary responsibilities include "establishing acquisition policy, supervising and evaluating PEOs, actively participating in the

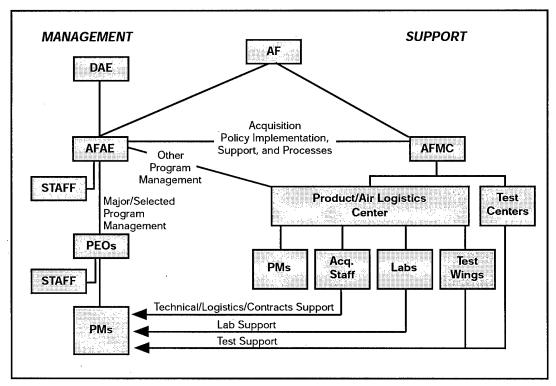


Figure 1. AF Acquisition Structure

biannual planning, programming, and budgeting system (BPPBS) process, representing the Air Force on various acquisition boards, interfacing with Congress and overseeing the execution of all acquisition programs" (Brooks, 1991, pp. 10–11). Figure 2 shows the current SAF/AQ organization.

PEO STRUCTURE, ROLES, AND RESPONSIBILITIES

In a memorandum forwarding the Air Force progress in meeting DMR goals, the SECAF reiterated that "responsibility and program management authority flows directly from the [AFAE] to the PEOs to program managers [of major and selected acquisition programs]. PEOs will have no other responsibilities and will report to no

one on program management outside the SAE/PEO chain" (Rice, 1989). The PEO would be a "senior operating official with the authority, responsibility, and accountability for a portfolio of related programs. The PEO is to be a planner of corporate strategies and objectives, a problem-solving team leader supported by acquisition commands" (Rice, 1989). The PEO is a line officer responsible and accountable to the AFAE for the cost, schedule, and performance (within baseline) of the portfolio.⁷

The PEO exercises authority by: issuing program direction to the program manager, baselining each program using the acquisition program baseline process; and serving as the direct reporting official for the program manager. The PEO exercises accountability through monthly acquisition reports, quarterly

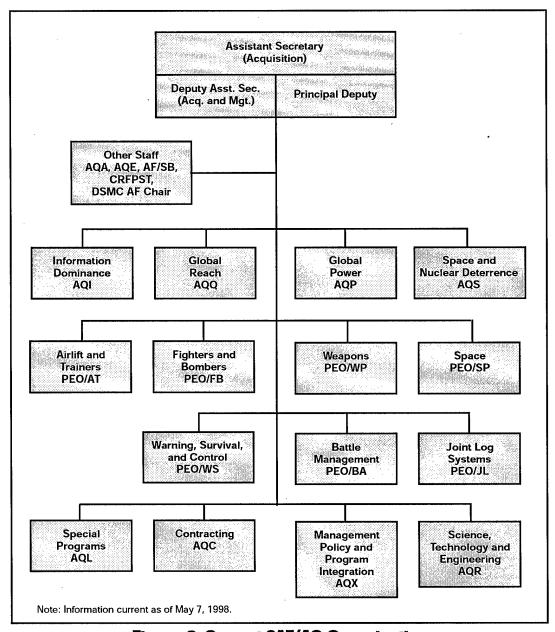


Figure 2. Current SAF/AQ Organization

defense acquisition executive summaries, breach reporting, and direct reporting only to the AFAE (SAF/AQ Management Workshop, 1995).

In implementing the PEO concept, the Air Force identified the following daily responsibilities of the PEO:

- Be deeply involved in all program execution matters.
- Provide program manager wisdom, experience, and insight into Pentagon and Washington politics.

- Screen the program manager from the Pentagon.
- Be the "eyes and ears" of the AFAE no surprises and make it happen.
- Work with infrastructure managers to ensure support.
- Approve program resource requirements.
- Develop (with the acquisition strategy panel) and implement acquisition strategy.
- Represent portfolio in the major reviews process.
- Counsel with the AFAE and MADs on programming and budgeting issues.
- Validate System Program Office (SPO) prepared program restructures ('whatif' exercises).
- Review all program documentation provided to the Pentagon and the Congress.
- Approve reprogramming of funds within portfolio (in/out) in the execution year.
- Interface with users during program objective memorandum preparation.
- Assist MADs in preparation of Air Force budget.
- Assist MADs in defense of the budget with OSD and the Congress.

- Support MADs on requirements and requirements reviews (summits).
- Evaluate program managers.
- Monitor the "health" of the program management team (Yates, 1990; SAF/ AQ Management Workshop, 1995).

However, in spite of the general duties and functions assigned, refining the details of the PEO's role and responsibilities often falls to the individual PEO, his interfaces, and occasionally to corporate vision.

DAC STRUCTURE, ROLES, AND RESPONSIBILITIES

The same AFAE memorandum that specifies the charter for the PEOs also identifies the responsibilities of the DACs. The product divisions and air logistics centers commanders of Air Force Systems Command and Air Force Logistics Command (forerunners to Air Force Material Command) assume the role of DACs. They perform functions similar to the PEOs. Established in a direct reporting line between subordinate program managers and the AFAE, the DACs are responsible for other than major or selected programs (Welch, 1990). However, as center commanders, the DACs serve an acquisition support role as well.

A SECAF memorandum on October 2, 1989, reaffirmed that "the AFSC and AFLC commanders would continue to be responsible for planning all required support throughout the life of all programs. These commanders [would] recommend, for [AFAE] approval, major program assignments to a PEO and coordinate with

the [AFAE] on other program assignments." They would be directly responsible to the AFAE for support to PEOs and program managers. The quality and availability of support to PEOs and program managers would ensure that SPO staffs "remain as small and efficient as possible" (Rice, 1989).

MAD STRUCTURE, ROLES, AND RESPONSIBILITIES

The MADs, along with the rest of SAF/AQ acquisition staff, provide the AFAE with the broad expertise and necessary functional support to ensure that his or her "authority, decisions, and management responsibilities are appropriately prepared, supported, and executed" (Welch, 1990). They also facilitate "the continuous interaction and dialogue between the AFAE, the PEOs, and DACs." Further, they function as the "focal point and conduit for all interfaces with Congress, OSD, JCS, other Services, Air Staff, and MAJCOMs" (Welch, 1990).

The MADs "work specific operational, test, technology, and developmental aspects of Air Force acquisition for other than the execution year. They are responsible for their mission area planning, integration, and budget process" (Brooks, 1991, p. 12). They must understand the warfighter's needs in their respective mission areas and ensure that the acquisition process addresses these needs. The MADs authorize programs and outline the responsibilities of the key players through the program management directive. They provide all acquisition inputs to the BPPBS (e.g., program objective memoranda, budget estimate summaries, President's budget) and develop the program budgets

within the Air Force Board structure. They also identify reprogramming sources for "top down" directed requirements (SAF/AQ Management Workshop, 1995). Table 1 summarizes the basic responsibilities of the PEOs, DACs, and MADs.

Thus, laws, regulations, and directives have defined the general structure, roles, and responsibilities of the Air Force acquisition chain from the DAE down to the program manager. This collective body has a complex multifaceted challenge to affordably field capable weapon systems to meet the warfighter's needs. The struc-

ture that accomplishes this demanding task was not the product of a bottoms-up approach, but rather evolved from a combination of self-generated improvements and imposed modifica-

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tions. While these identified roles and responsibilities within this organizational structure may appear to be clear and consistent, numerous issues exist in practice. What are these issues and how have they affected the ability of the Air Force to comply with the intent of the Packard Commission? The next sections attempt to answer these questions.

ISSUES

In spite of the many benefits that acquisition streamlining and reform initiatives have brought to the Air Force acquisition community, they also have introduced some issues related to roles and

Table 1. Comparison of Responsibilities

Responsibility	DAC	PEO	MAD
BPPBS interface			Х
Air staff interface			Х
Congressional interface			Х
Mission area planning and integration			Х
Requirements coordination	Shared (DAC programs)	Shared (PEO programs)	Shared
Program management directive	Shared (DAC programs) (coordinates)	Shared (PEO programs) (coordinates)	Shared (issues)
Baselines	Shared (DAC programs)	Shared (PEO programs)	Shared
Defense acquisition executive summary (DAES)	Shared (DAC programs)	Shared (PEO programs)	Shared
OSD interface	Shared (DAC programs)	Shared (PEO programs)	Shared
Preparation for milestone reviews	Х	х	
Program planning	Х	Х	
Program oversight	Х	Х	
Reprogramming approval in execution year	Х	Х	
Program execution	Х	х	
SPO resources requirements generation	X (DAC programs)	X (PEO programs)	
SPO resources support (personnel, facilities, etc.)	X ¹		
Rating of PEO program office personnel	X (except PM) ²	X (PM only)	

¹ As the product center or air logistics center commander.

responsibilities within the PEO/DAC/MAD organizational structure. Many of these issues arise from the introduction of the PEO into the community and his role relative to the program manager, AFAE, DAC, and MAD. The PEO's role is unclear because it's relatively new, it naturally

overlaps the roles of others in an already complex operating environment, and no formal process exists to resolve legitimate differences between the PEO and the others. Other issues deal with the "dualhatted" nature of many key players, which leads to having two bosses or two sets of

² Information is current as of May 7, 1998.

assigned responsibilities. The first few issues deal with defining the role of the PEO.

PEO: SUPER PROGRAM MANAGER OR JUNIOR AFAE?

The lack of clarity of the PEO's role has led some observers to ask where the PEO's primary function resides in the direct reporting chain. Is the PEO a "super program manager," wrapped in the details of managing and executing the programs in his portfolio? Or is the PEO a "junior AFAE," providing wisdom and "top cover" for the program manager, yet lacking the authority to make milestone decisions? As one PEO (and former program manager) interpreted this relationship: "The PEO is the former only when the program manager asks for help or a train wreck is impending. It's like UPT [undergraduate pilot training]: take control too soon and the student doesn't learn; too late and he doesn't survive. The proper position is closer to the latter. The PEO bridges the gap between the program manager and the AFAE. The PEO belongs in the Pentagon so that he doesn't screw with a program too much."9

So, the PEO must provide acquisition expertise when the program manager needs it. The PEO must understand and work the politics inside the Beltway and within the Pentagon and advise the program manager on the sensitivities and realities. The PEO's forward presence enables him to defend the program while screening the program manager from many of the "brush fires" and time-consuming diversions of the Washington environment.

The PEO also must be aware of the programmatics and challenges of the

programs in his portfolio, and ask: What does the program manager need? The PEO is in a unique position to aid his program managers. As a PEO summed up the situation, "The PEO appears to be the only

person with a small enough span of control to help the program manager. The PEO can get on the phone

"In reality then, the PEO is both a super programmenager and a junior AFAE."

with enough horsepower and contacts to get work done. The center commanders are swamped running their centers and the MADs don't know all of the details."

In reality, then, the PEO is both a super program manager *and* a junior AFAE. He aids each end of the Air Force acquisition chain of command to ensure information, policy and guidance, and decisions flow freely and accurately in both directions.

DILUTION OF THE PEO'S ROLE

The PEO charter specified that the "PEO organization is a field agency reporting directly to the AFAE and not part of the Assistant Secretary's acquisition staff" (Welch, 1990). According to one PEO, however, that relationship is often lost on current senior officials.

Mr. Welch [AFAE] and General Jaquish [his principal deputy] had a clear view in the beginning. They did not have the PEOs attend AQ staff meetings, but rather held separate meetings with the PEO to discuss program execution. PEOs did not coordinate on or sign staff summary sheets, because they didn't do staff work. That was part of the

reason for the small staff size. Since then, there has been a blurring of roles; much of the PEO work is not known or understood by newcomers. The early implementation dealt with what should be the structure, how to put it together, and what should be the charter to meet the Packard Commission intent. With the turnover of personnel, the new folks haven't gone back to review the charter, and don't know the responsibilities. PEOs now have demands that compete with their primary roles: membership on process action teams, policy coordination, etc.

The option of establishing a Deputy PEO (O-6 or GM-15) position can help mitigate the increased workload, but a problem still exists in the basic understanding of the PEO's position and function. Even the SAF/AQ organizational chart (Figure 2) can be confusing. Again, a PEO reminds the listener:

PEOs are not on the AQ staff, but rather represent field operating agencies and carry Air Force Program Executive Office SEIs [special experience identifiers]. This fact is lost on a lot of people. The MADs come in from Using commands and just see the areas closely aligned with their responsibility; they don't see the activities unique to the PEO: contracting approval (business clearance), acquisition strategy panels, justification and approvals, acquisition plans, source selection

authority, undefinitized contract actions, and [the execution] budget.

Clearly, a misunderstanding of the PEO's position has been a recurring theme since its creation. Much of the confusion lies in the overlapping nature of the roles and responsibilities of the PEO and those of the DAC (as the center commander) and MAD.

OVERLAPPING RESPONSIBILITIES (PEO/DAC (CENTER COMMANDER))

The DAC's role as a center commander establishes a closely linked relationship with the PEO that has had mixed results on execution. The product or air logistics center commander is responsible for policies, procedures, facilities, staff support, personnel, and training. These elements are essential for supporting the PEO program. They avoid redundancy and enable a small PEO staff. However, the operating relationships can overlap and become unclear.

The central issue is the point at which support ends and program control begins. Even in a support role, the center commander influences program execution and effectiveness. The people and facilities he or she provides, the policies imposed, and the training requirements levied all influence the quality of the inputs to the acquisition process and, therefore, affect the product. One PEO expressed his concern: "Separation of resource control and program execution responsibility is unnatural in our culture, and we do not have a complete understanding of the interfaces." This issue has several dimensions.

First, the center commander provides the people that serve on the programs in accordance with his charter. However, PEOs often express concern that their ability to influence this decision has been limited. A DAC once expressed to his staff: "The PEO tells me what positions he needs filled on one of his programs, and I determine who will fill them." The center commander, in essence, determines the relative priority of this program when it comes to providing support. Usually, this concern is not a significant problem. However, one PEO related that he had lost a senior member of one of his programs (an O-6) to another program without the commander notifying him of the reassignment.

Second, except for the program manager (system program director, or SPD), the center commander has the responsibility for evaluating all program office personnel. Thus, functional experts who fill matrix positions within a PEO program face the potential dilemma of divided loyalties.

Third, the center commander controls the budget for many resources: contractor support, program manager salaries, travel and office operations, systemspecific software engineering and new equipment training. Sometimes the PEO lacks the sufficient visibility and control into this portion of the budget that directly affects the program baseline.

Fourth, in reviewing the status of functional support to PEO programs, the center commander is in a position to influence program execution. Certainly a functional review is appropriate, but problems arise if this meeting broadens into a program review where direction replaces advice and insight.

Finally, the center commander is in a position to task program personnel in a manner that detracts from their contribution

to the program. As one PEO pointed out, "When the center's contracting officer reviews a document for my program, he's working for me, not the center commander. It's okay to pass the information on to the commander, but not okay to impose extra work on the program [e.g., to provide the data in the center's preferred format]." He went on to cite other conflicts with his program's needs, such as

the commander having the program manager attend an offsite with him on center matters or tasking a program O-6 to run an air show.

"Even in a support role, the center commender influences program execution and effectiveness."

According to a former deputy program director on a major program, "Roughly 30 percent of the time I spent on the program involved handling the support from the DAC."

These factors in the overlapping relationship between the PEO and the DAC can confuse the program manager and his SPO personnel. To whom do they go to first on matters of advice and counsel? Sometimes the answer is as much a matter of proximity (collocation with the center's functional support) and rank ("How do you say 'no' to a three-star?") as it is the acquisition chain of command. In fact, said a PEO, "Program personnel have occasionally played the center commander and PEO off each other—depending on which position or chain of command better serves their purpose."

These potential problem areas stem from the chartered relationship in the PEO/DAC/MAD acquisition structure. Fortunately, they usually are neither frequent

nor serious in nature. The PEO and the DAC (center commander) both have responsibilities and faithfully seek to accomplish them all. Where ever they conflict, negotiating a mutually acceptable solution is the best course. A PEO reinforced this consideration, "Having a good rapport with my counterparts prevents adverse effects; the relationship makes it work."

OVERLAPPING RESPONSIBILITIES (PEO/MAD)

The PEO and MAD also experience a complex relationship that proves both beneficial and difficult. Although they have different job descriptions, their areas of responsibility dovetail at best and conflict at worst. The PEO focuses "downward" toward the SPOs, contractors, and industry, and the warfighters related to the

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programs in his portfolio. The MAD perspective takes an external view, dealing with the Air Staff and Secretariat, the other Services, OSD, Congress, the media, and the warfighters

related to his mission area. The PEO deals with the execution of his programs with current year funds. The MAD plans, programs, and budgets for future year efforts.

These different perspectives can be beneficial. Different views and goals provide a creative tension. The magnitude of effort to usher a weapon system through the BPPBS and acquisition milestone processes is far beyond what one individual and his staff can accomplish. However,

acting as a team, the PEO and MAD can complement each other's role to jointly succeed in their tasks. For example, the MAD's interaction with Congress, the rest of DoD, and other outside agents clear the PEOs to concentrate on program execution. In return, the PEO's detailed program insight can facilitate the MAD's disseminating information, coordinating requirements, and generating BPPBS inputs and reclamas.

Still, the overlap in the activities of these two offices can place a strain on the acquisition process. Sometimes the strain is structural in nature. The PEO has responsibility for current year execution, but the MAD takes the lead for out-year budgets. Clearly, funding cuts to the latter affects the conduct of the former. Hence, the PEO is accountable for sound program execution, but has little control over the process of resourcing future needs. At other times, the strain is a matter of experience and perspective. Take, for example, the experience of a former Acting SPD (program manager) of a major joint program. "A Congressional staffer sought to reduce our program office manning by 50 percent. Our PEO assembled a rebuttal to fight it, but the MAD didn't think it mattered and failed to forward it to the staffer. It took significant effort to recover most of this cut."

The program manager, too, feels this strain in needing to work with both the PEO and the MAD on issues where the lead responsibility is unclear. For example, when Congress asks questions on program details (e.g., "What are you doing with the management reserve?" "Why aren't you on contract?"), should the MAD answer the question because he is the Congressional interface? Or should the PEO

answer it because he has extensive insight into the program? Other examples of this gray area are "what-if" drills from OSD, other agency inquiries, foreign military sales, 10 and taskings from outside the directed programs.11

PEO and MAD activities will continue to overlap. Said one PEO, "It's possible to do some of each other's stuff (I wordsmith all answers to Congress), but each should always invite the other to review and coordinate. Interpersonal relations determines how it will work out."

Recently, SAF/AQ (AFAE) restructured the MAD and PEO portfolios to better align and ease coordination and communication. Yet perfect one-on-one alignment is unlikely between program portfolios and mission areas. Added one PEO, "The emergence of information systems nearly guarantees more than one MAD with which to interface. For example, weapon systems using information systems in development will require the overseeing PEO to deal with the MAD for information dominance as well as the director overseeing the mission area containing the weapon system."

In reality, one cannot do his job without the other. Coordination, teamwork, trust, and mutual support are essential to accomplishing their collective tasks. These attributes compensate for the lack of clarity between in the role of the PEO and those of the other members of the acquisition community. However, not all of the issues stem from the establishment of the PEO. Some issues result from the "dual-hatted" nature of the several key players within the community.

"DUAL-HATTING" OF **Acquisition Leadership**

The "dual-hatting" of the program manager, DAC, and AFAE often imposes difficulty in the acquisition process. These individuals have to respond to multiple "bosses" or have to perform more than one set of responsibilities. As shown earlier, the program manager has to deal effectively with the PEO/DAC and PEO/MAD overlaps. In the first case, the program manager of a major program must work with the DAC (as a center commander) for his resources and acquisition support and with the PEO for execution matters. In responding to Congressional inquiries and OSD taskings, he must deal with both the MAD and the PEO. Again, this duality can generate confusion and redundant taskings.

The DAC, too, performs dual roles and serves more than one boss. In fulfilling his DAC roles, he responds to the AFAE on all acquisition matters concerning his portfolio. On resources and acquisi-

tion support and for sustainment matters, he responds through the Air Force Materiel Command (AFMC) commander to the Air Force

"The "dual-hatting" of the program manager, DAC, and AFAE often imposes difficulty in the acquisition process

Chief of Staff. Two concerns arise from this situation. First, like the program manager, the DAC has a complex task in satisfying two different superiors whose diverse interests potentially overlap and may conflict. Second, the 1989 shift in the acquisition chain of command away from the AFSC (now integral to AFMC) commander to the AFAE effectively splits acquisition from sustainment. One of the purposes in combining AFSC and AFLC into AFMC was to instill a "cradle-to-grave" perspective in integrated weapon system management. While the execution-level organization may embrace this perspective, it is not a natural byproduct of at the senior Air Force command structure.

Finally, the AFAE also wears two hats and serves two bosses. For example, as SAF/AQ, Mr. Money reported to SECAF Widnall on Air Force acquisition matters. However, as the AFAE, Mr. Money reported to the DAE, Dr. Kaminski, who was the MDA for Acquisition Category (ACAT) I D programs.

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"These dual-hatted positions are not necessarily counterproductive—they may be the best. Use of acquisition expertise and a logical fusion of roles to ensure a consistent policy programes excition, and reporting."

be the best use of acquisition expertise and a logical fusion of roles to ensure a consistent policy, program execution, and reporting. Nevertheless, coordination and interaction with these dual-hatted positions

can be complex and require special attention to the relationships.

Thus, the Air Force acquisition structure has problems in role definition, responsibility overlap, and dual-hatted leaders. How do these issues affect the benefits sought from implementing the Packard Commission recommendations?

MEETING THE PACKARD COMMISSION INTENT

The Packard Commission cited the lack of accountability and unambiguous authority in acquisition programs and the burdening of the program manager with non-value-added reporting requirements. The Air Force implementation of the recommended three-tiered (AFAE-PEO-PM) structure for major defense programs meets the Commission's intent and largely corrects the identified shortcomings. However, as the previous section points out, this structure falls short of total compliance. Consider this assessment in terms of the desired characteristics of successful projects: clear command channels, program stability, limited reporting requirements, small, high-quality staffs, communication with users, and better system development.12

CLEAR COMMAND CHANNELS

The evolution of the Air Force acquisition structure, a direct result of implementing the Packard Commission recommendations, specifically addresses the desire for clear command channels. DoD policy instituted the AFAE-PEO-PM and AFAE-DAC-PM direct reporting chains for all acquisition programs, establishing accountability and reducing bureaucracy. The AFAE position as the single civilian responsible for all Air Force acquisition matters strongly benefits this goal. Program managers have a defined and direct reporting path through at most one individual (a PEO or DAC) to the AFAE. Further, PEOs and DACs have "privileged lines of communication to the AFAE" (Welch, 1990). This streamlined reporting

structure can be particularly useful for situations dictating timely acquisition communication and decision making. According to one PEO, "Streamlining has occurred. Now when a breach occurs, the reporting and working of the issue is much faster. [The chain is no longer] 'PM-center commander-AFMC/Commander-Chief of Staff of the Air Force (CSAF)-SECAF,' but rather 'PM-PEO-AFAE.'"

While program execution benefits from this three-tiered reporting structure, the command channel is less clear in matters of support and planning. Previous discussions illustrated how overlapping roles and responsibilities and the dualhatting of key positions introduce complex interactions that confuse both participants and observers alike. SPO personnel must keep both the PEO and the center commander (DAC) satisfied. Also, they must respond to both PEO and MAD taskings, balancing and integrating the information to meet overlapping needs. Further, the DAC and the AFAE have other demanding duties they perform to satisfy superiors outside the direct reporting chain for acquisition matters. Again, cooperation and coordination compensate for these structural imperfections. However, compensation is less likely for those individuals who interact with the acquisition community from the outside.

MAJCOM commanders, for example, often fail to appreciate the various nuances. As one PEO pointed out, "The four-stars don't like the system. It's due to denial, ignorance, and the desire to talk to another four-star vice a one-star. They take up their issues with the AFMC commander and the product center commander, who have no authority on the

[PEO] programs. Instead, they need to talk to the AFAE and the PEO." Even then, confusion may persist: On one occasion where the MAJCOM commander forwarded an issue to a PEO, it involved a weapon system already transferred out of the acquisition realm and into the CSAF-AFMC-system support manager sustainment chain.

Thus, the acquisition chain offers a streamlined command chain with clear accountability in execution. However, structural conflicts and overlaps in responsibilities complicate the handling of several important matters germane to the execution process and the principles of integrated weapon system management.

PROGRAM STABILITY

The impact of this acquisition structure on program stability is similar to its affect on the command chain. The focusing of

acquisition activities around the three-tiered acquisition structure facilitates a coherent policy and acquisition strategy. A PEO, with responsi-

"The focusing of acquisition activities around the three-tiered acquisition structure facilitates a coherent policy and acquisition strategy."

bilities restricted to the execution of his portfolio of related programs, aids program stability by bridging the interests and needs of the program manager and the AFAE. His attentive oversight extends the AFAE's effectiveness. His focused protection of the program manager's program from outside influences helps shelter the program from destabilizing funding cuts and non-value-added taskings. His ability to move money around within his portfolio

further adds to program stability. Barring a dilution of his role with additional staff duties, the PEO is a stabilizing influence on his portfolio's programs.

Again, however, overlapping responsibilities and dual-hatting can have detrimental effects on program stability. For example, while the PEO can control current year execution and responses to funding cuts, the MAD has the future year programming and budgeting responsibilities. A concerted effort of both the MAD and the PEO is necessary to ensure program stability.

LIMITED REPORTING REQUIREMENTS

Establishing a three-tiered acquisition structure directly reduces the number of levels required to gain approval for program milestones. Certainly the PEO's role and location in the Pentagon relieve the program manager from encumbering briefing demands. Also, by handling a portfolio of related programs, the PEO and the DAC filter the detail and quantity of briefings and reports the AFAE has to receive.

But while the approval briefing requirements are fewer, the program manager has increased demands of coordination and information reporting to address his interface with the center commander and the MAD.

SMALL HIGH-QUALITY STAFFS

The Air Force implementation of the PEO position limited the staff size to six people. Initial arguments suggested that a staff more than three times that large would be necessary to properly oversee an entire portfolio of programs. However, the prevailing attitude of senior acquisition officials was that the 2000 personnel

located in the SPOs represented the expertise necessary to execute the programs. The PEO and his staff needed to tap that existing capability rather than adding redundancy to it. Still, over time some PEO staffs did expand to include the position of a deputy PEO. This individual helps shoulder the PEO's demanding portfolio (often spread across three product centers) and Pentagon responsibilities.

COMMUNICATION WITH USERS

All members of the acquisition chain have a responsibility to communicate with the warfighters as part of their collective charters. At the intermediate level, the PEO shares this responsibility with the appropriate MAD(s). Their perspectives are slightly different, but taken together and properly coordinated, they should be able to address the user's needs. Again, though, some users have been unclear with whom (e.g., PEO or MAD, AFAE or AFMC/CC) they should deal on certain issues.

BETTER SYSTEM DEVELOPMENT

The new acquisition structure does not specifically address system development improvements. Many other acquisition reform initiatives focus on this characteristic. Still, a command chain that operates with a coherent policy and strategy and uses efficient reporting mechanisms is better equipped to develop affordable and effective weapon systems.

In general, then, the Air Force acquisition structure meets the intent of the Packard Commission. It reduces bureaucracy and provides a streamlined command chain accountable for program execution and reporting. The tiered nature of the AFAE-PEO-PM chain allows each

level to focus on key needs and capabilities that enhance program stability and enable better system development. The MADs and center commanders (DACs) play vital roles in this complex process. However, their support also complicates the lines of authority, control, and responsibilities. Much of the difficulty is unavoidable and usually does not create substantial problems. Still, senior leadership continues to seek solutions to refine the overall process. What are some of the current options under consideration?

OPTIONS FOR IMPROVEMENT

As the PEO/DAC/MAD acquisition structure evolves, the participants have proposed numerous alternative implementation approaches to improve both process and product. One improvement recently incorporated by some PEOs was the addition of the deputy PEO position to assist in the oversight role, both in Washington and in the field. Another involved the restructuring of portfolios to better align the PEO and MAD areas of responsibility. Many suggestions have fallen by the wayside, victims of an impracticable, unwanted, or unbalanced implementation plan.

However, two recent ideas proposed at the SAF/AQ Workshop in June 1995 warrant discussion. The first involves drawing the PEO and MAD activities into a tighter relationship to improve coordination and cooperation. The second involves dividing the DAC and center commander duties among two senior officials. These proposed changes directly address two important weak points in the Air Force acquisition structure: the overlap in

responsibilities between the PEO and the MAD, and the dual-hatted role of the DAC.

COLLOCATE OR COMBINE MAD AND PEO STAFFS

One approach to reducing the difficulties experienced due to the PEO/MAD overlap in responsibilities is to collocate or combine their staffs. Collocation helps to build trust and cooperation. This arrangement improves efficiency through

shared expertise and improved coordination. It also facilitates a common, balanced focus on BPPBS inputs, program execution, and interaction with all interfaces, with-

"Collocation helps to build trust and cooperation. This arrangement improves efficiency through shared expertise and improved coordination."

in and outside the acquisition community. SAF/AQ recently intended to collocate the PEO and MAD staffs, but a scheduled move out of the Pentagon (during its refurbishment) interrupted the plan. Combining staffs extends the collocation concept further and also permits a reduction in manning.

Unfortunately, these initiatives have drawbacks as well. The current structure provides a "creative tension" that two different perspectives bring. Areas of concern to both parties undergo a system of checks and balances. One PEO expressed a concern of the PEO role becoming subordinate to that of the MAD. Combining the staffs would make dual leadership cumbersome and potentially counterproductive. Another difficulty lies in the proper handling of all matters the

PEO and MAD currently address; combining these activities creates an unwieldy span of control. Finally, because the PEO portfolios and the MAD areas of responsibility do not perfectly align, some discontinuities would remain across the acquisition front between the two sets of responsibilities.

Still, the collocation or near collocation of staffs has merit. The benefits of improved efficiency and interaction between the PEO and the MAD reduce the problems generated by their overlap in responsibilities. Careful attention to the drawbacks can mitigate their impact.

PRODUCT CENTER REALIGNMENT— DEPUTY COMMANDER AS "FIELD PEO"

Another proposal from the SAF/AQ Workshop entailed separating the DAC and center commander duties. Center commanders would continue handling personnel, processes, training, and support. The deputy commander would assume the DAC duties and become essentially a "Field PEO." His responsibilities would be the same as the current PEOs, except he would operate at the product center and oversee a portfolio of "other than major or selected" programs.

"Careful attention to the drawbacks [of staff collocation] can mitigate their impact." Because of the acquisition category of the programs involved, posting this individual at the Pentagon would not be neces-

sary. This restructuring would eliminate the dual-hatted problem of running a product center and serving as the DAC.

While this proposal reduces the span of control of a critical acquisition and

leadership position, it still does not address the PEO/center commander overlap in responsibilities in resourcing and executing a program. Instead, it adds a second overlap between the field PEO (DAC) and the center commander. Two individuals would need to address issues formerly resolved by a single individual—and one of these individuals would be directly reporting to the other.

The field PEO concept makes sense. However, to properly realize its benefits, the field PEO should report to the AFAE and not the center commander. This implementation would not solve the overlap issue, but it better serves program execution and accountability.

CONCLUSIONS AND RECOMMENDATIONS

The close scrutiny given to the acquisition process over the past decade identified a need for streamlining and reform. One initiative created the PEO and "inserted" this position into a three-tiered direct reporting chain. The PEO's duties focus on overseeing the execution of a portfolio of related programs. He provides the program manager top cover, helps the AFAE with his span of control, and bridges the linkage between the two.

Inserting the PEO position modified an existing structure. The implementation did not result from a bottoms-up construction. Consequently, incongruities developed. The roles and responsibilities of the PEO overlapped those of the DACs/center commanders and the MADs. Blurred roles, conflicting responsibilities, and dual-hatted leadership have occasionally undermined the program execution and support process. Often, the program

manager and the SPO find themselves caught between two worthwhile but conflicting demands.

Yet the process can and has worked. Personality, trust, coordination, and cooperation can foster the relationships and efficiency to overcome these hurdles. The fact that many of the key players in the PEO/DAC/MAD/PM structure have filled more than one of these positions promotes a bond of understanding. Unfortunately, the turnover of key participants requires continuous adjustment and re-education along the learning curve to make the system work.

The process continues to evolve. Room for improvement still exists. The genesis of this improvement lies in continued discussions (e.g., offsites) that bring issues to forefront where they can be aired and resolved. These discussions generate options. Some options, though plausible, fall short for a variety of reasons (e.g., current structure, inertia, different perspectives, different functional responsibilities, and impractical span of control).

Other options, though, stand out as reasonable improvements worthy of implementation. In particular, I recommend that senior Air Force leadership give further consideration to the following two modifications to currently proposed changes.

First, at the earliest opportunity, collocate (or nearly collocate) the PEO and MAD staffs to increase the positive aspects of close interaction and to resolve issues due to overlaps in responsibility. Do not combine these staffs, but rather retain their independence. Their spans of control are manageable and their different perspectives promote a creative tension that can ensure an optimized and balanced solution.

Second, create a field PEO position that assumes the current DAC responsibilities. This individual would report directly to the AFAE for his portfolio of programs. Like the current PEOs, field PEOs would have a small staff and receive acquisition support from the center commander. The PEO/center commander overlap in responsibilities would remain an area of concern requiring cooperation and further attention.

These recommendations seek to enhance an acquisition structure that currently handles the difficult and complex acquisition process in spite of its structural flaws. Further clarification of roles and responsibilities is appropriate. The interfaces and overlaps between positions should yield synergy, not duplicity or conflict. Continued refinement to the Air Force acquisition structure will ensure a successful pattern for future weapon systems acquisition.



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ENDNOTES

- Synonymous terms for the service acquisition executive (SAE) are the component acquisition executive (CAE) and, for the Air Force, the Air Force acquisition executive (AFAE).
- 2. Synonymous terms for the program manager include, in some cases (i.e., for major programs), program director (PD), or system program director (SPD). The term single manager, which can represent a SPD, product group manager, or materiel group manager, may also substitute for program manager in certain (usually acquisition) cases.
- 3. Originally designated as USD(A), this individual also serves as the defense acquisition executive (DAE).
- 4. DoD Instruction 5000.2. Assignment of Program Executive Responsibility—Description: "Each component acquisition executive should appoint a number of program executive officers (PEOs) who, like group general managers in industry, should be responsible for a reasonable and defined number of acquisition programs. Program managers for these programs should be responsible directly to their respective PEO and, on program matters, report only to him. In other words, every major program should be set up as a center of excellence and managed with modern techniques."

5. AF Policy Directive 63-1:

Para. 1.4.3.1. Air Force ACATID programs are managed by the AFAE, a program executive officer (PEO), and an SPD, with the defense acquisition executive as the MDA. The AFAE is the MDA for ACATIC programs. Occasionally, an ACAT I program may not be assigned to a PEO, and the SPD will report directly to the AFAE. Air Force ACAT I C programs that meet the conditions specified in Department of Defense (DoD) Instruction 5000.2, Defense Acquisition Management Policies and Procedures, February 23, 1991, may be transferred to a designated acquisition commander (DAC).

Para. 1.4.3.2. Major Automated Information Systems programs (ACAT I M) are managed by the AFAE, a PEO, and an SPD with the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) as the MDA.

Para. 1.4.3.3. Air Force ACAT II programs are managed by the AFAE, the DAC, and an SPD, unless the program has been selected by the AFAE for special oversight and assigned to a PEO. The AFAE is the MDA for ACAT II programs.

Para. 1.4.3.4. Air Force ACAT III and IV programs are managed by the AFAE, the DAC, and an SPD, unless the program has been selected by the

AFAE for special oversight and assigned to a PEO. The AFAE will exercise his or her responsibilities on an exception basis when considered necessary as a result of a report from the DAC. The DAC is the MDA for ACAT III and IV programs. DACs may recommend to the AFAE that smaller dollar value, low-risk programs be designated as ACAT IV. The MDA for these ACAT IV programs may then be delegated below the DAC by the AFAE.

- 6 AF Policy Directive 63-1, para. 1.6.1.... Unless otherwise directed by SAF, the AFAE is the MDA for ACAT I C through IV programs and may delegate this authority as appropriate. With the exception of selected programs, the AFAE has delegated MDA for ACAT III and IV programs to the appropriate DAC. The ASAF(A) is the AFAE, the senior procurement executive, and the senior information resource management official.
- 7. Both PEO and DAC portfolio contents are available on the Internet at the SAF/AQ Web site, www.safaq.af.mil.

- 8. Consistent with the responsibilities outlined in the Program Management Directive, as authorized by the applicable MAD.
- 9. The National Defense University academic nonattribution policy precludes identifying the specific source of the cited material unless it has been released previously. Subsequent unattributed quotes in this article reflect this policy.
- 10. Foreign military sales also involve SAF/IA.
- 11. Examples include PEO/MAD overlap in responding to imposed environmental mandates and data collection requests on areas such as composites development.
- 12. Remember, however, that this assessment relates only to the impact of the new acquisition structure, and not the contribution of other acquisition reform initiatives, on the six desired characteristics.

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